

Claims

1. Method for detecting a radio coverage in a multicellular mobile radio system with a plurality of base stations (BS1 to BS9) which are connected to an evaluation unit (AE),

5 characterized in that

all base stations are switched consecutively into a measuring operating mode, whereby a relevant field strength (FS1 to FS4, FS6 to FS9) of locally adjacent base stations which are operating in a normal operating mode (BS1 to BS4, BS6 to BS9)

10 is measured, and the measured field strength data is evaluated by the evaluation unit (AE).

2. Method as claimed in claim 1,

characterized in that

the base station (BS5) switched into the measuring operating

15 mode in each case is synchronized with the base stations (BS1 to BS4, BS6 to BS9) operating in normal mode.

3. Method as claimed in claim 2,

characterized in that

a quality of the synchronicity is measured and evaluated.

20 4. Method as claimed in one of the claims 1 to 3;

characterized in that

the radio coverage detection is undertaken in cycles, with a current evaluation result being compared with at least one previous evaluation result.

25 5. Method as claimed in one of the claims 1 to 4;

characterized in that

the evaluation unit (AE) controls the base stations automatically and evaluates the measured field strength data automatically.

30 6. Method as claimed in one of the claims 1 to 5;

characterized in that  
the measured field strength data has a base station  
identification.

7. Method as claimed in one of the claims 1 to 6;  
5 characterized in that  
the evaluation unit (AE) modifies the mobile radio system  
depending on the evaluation result.

8. Method as claimed in one of the claims 1 to 7;  
characterized in that  
10 the evaluation unit (AE) creates field strength maps for  
determining the positions of mobile units.

9. Method as claimed in one of the claims 1 to 8;  
characterized in that  
the multicellular mobile radio system is designed in  
15 accordance with the DECT standard.

10. Arrangement for detecting a radio coverage in a  
multicellular mobile radio system with a plurality of base  
stations which are connected to an evaluation unit (AE),  
characterized in that,  
20 at least one base station (BS5) is operated in a measuring  
operating mode, in which a relevant field strength (FS1 to  
FS4, FS6 to FS9) of locally adjacent base stations which are  
being operated in a normal operating mode is measured, and  
the evaluation unit (AE) evaluates the measured field strength  
25 data in each case.

11. Arrangement as claimed in claim 10,  
characterized in that  
the base station (BS5) operated in the measuring operating  
mode in each case is synchronized with the base stations (BS1  
30 to BS4, BS6 to BS9) operated in normal mode.

12. Arrangement as claimed in claim 10 or 11,  
characterized in that

the radio coverage detection is undertaken in cycles, with a  
current evaluation result being compared with at least one  
5 previous evaluation result.

13. Arrangement as claimed in one of the claims 10 to 12,  
characterized in that

the measured field strength data has a base station  
identification.

10 14. Arrangement as claimed in one of the claims 10 to 13,  
characterized in that

the evaluation unit (AE) modifies the mobile radio system  
depending on the evaluation result.

15. Arrangement as claimed in one of the claims 10 to 14,

15 characterized in that

the evaluation unit (AE) creates field strength maps for  
determining the positions of mobile units.

16. Arrangement as claimed in one of the claims 10 to 15,  
characterized in that

20 the multicellular mobile radio system is designed in  
accordance with the DECT standard.